

"a cylinder suspension of the engine is prohibited when an abnormality in an operation state of an active anti-vibration supporting device is detected" (*Office Action*, p. 4) as recited in Claims 11-20. The Office Action asserts that Tanaya cures the admitted deficiencies of Nemoto with respect to Claims 1-20.

The present invention recited by the pending claims has been attained in view of deficiencies encountered in conventional structures. For example, when an abnormality is generated in an engine during operation of an active anti-vibration supporting device and results in a sudden increase in the amount of vibration, a conventional active anti-vibration supporting device is forced to operate in excess of a limit of the system's ability in an attempt to suppress the vibration. As a result, an abnormality may be generated in the active anti-vibration supporting device itself, or the durability of the active anti-vibration supporting device is decreased.

On the other hand, when an abnormality is generated in the active anti-vibration supporting system itself that is associated with an engine of a cylinder suspendable type, if the operational state of the engine is switched to an operational state in which an amount or level of vibration is increased, the conventional active anti-vibration supporting device may not be able to suppress the vibration, resulting in an increase of noise and/or the amount or level of vibration.

In the case of the above first-mentioned problem, and referring to Fig. 1 by way of illustration, when an abnormality is generated in an engine associated with the active anti-vibration supporting device M, the operational range of the device M may be undesirably made larger. Moreover, in such a case, in a state where the movable member 20 has been drawn toward the armature 38, a large vibration may

be input from the engine side and the armature 38 may undesirably collide against the yoke 32, causing damage in the active anti-vibration supporting device M. Hence, when such an abnormality occurs in the engine, it is necessary to prevent damages from being generated in the active anti-vibration supporting device M.

Claim 1 recites a feature wherein operation of the active anti-vibration supporting device is prohibited when an abnormality in an operational state of the engine is detected, which avoids the above-discussed inconveniences.

In the case of the above second-mentioned problem, where an abnormality is generated in the active anti-vibration supporting device, the active anti-vibration supporting device may not be able to suppress the vibration in the engine and this may result in an increase of noise and/or the amount or level of vibration in the engine. Hence, it is necessary to suppress an increase in the engine vibration.

Claim 11 recites a feature wherein the cylinder suspension of the engine is prohibited when an abnormality in an operational state of the active anti-vibration supporting device is detected, which avoids the second problem.

The Office Action newly cites Tanaya in combination with Nemoto to reject both independent Claims 1 and 11, as well as their dependent claims. Applicants respectfully disagree with the stated basis of the rejection. In explaining the basis of the rejection, the Office Action considers the "knock control" taught by Tanaya as corresponding to the active anti-vibration supporting device recited by Claims 1 and 11 of the present invention. See the sentence bridging pages 5 and 6 of the Office Action. The paragraph of Tanaya specifically relied upon by the Office Action, i.e., column 9, lines 6-15, relates to the fourth embodiment of the invention in Tanaya.

The cited disclosure of Tanaya teaches that knock control is prohibited when an abnormality of npn (knock pulse number) exceeding the upper limit is detected. However, Tanaya teaches that the actual control of the knocking of an engine is performed by the "engine control unit". Claim 8 of Tanaya specifically recites that "the engine control unit prohibits knock control." Thus, the "knock control" used throughout Tanaya, and cited by the Office Action, is not a device. Rather, the "knock control" taught by Tanaya is a function of the "engine control unit".

Tanaya actually teaches that when an abnormality of npn exceeding the upper limit occurs, the operation of the engine control unit is not prohibited at all, but the engine control unit is required to perform its one function, i.e., prohibiting knock control. Thus, when such an abnormality occurs, the engine is put in a normal operational state without knock control. The cited teachings of Tanaya are not at all intended to prevent damage from being generated in the engine control unit itself (or in "knock control").

With respect to Claim 1, wherein the operation of the active anti-vibration supporting device is prohibited when an abnormality in an operation state of the engine is detected, it should be noted that even if operation of the active anti-vibration supporting device is prohibited, it does not return the engine to its normal operational state. The Office Action's assertion on page 3 that Tanaya may be combined with Nemoto "so the engine can be operated in a safer manner" has nothing to do with the invention recited in Claim 1. In fact, Tanaya does not teach or suggest at all the use of an active anti-vibration supporting device.

Moreover, with respect to Claim 11, contrary to the Office Action's assertion on page 5, Tanaya does not teach or suggest prohibiting the function of an aspect of the engine when an abnormality in an operational state of the knock control apparatus itself is detected. Rather, Tanaya discloses that an upper limit (n_{pn}) is provided for the number of knock pulses detected from the operation of the engine. An abnormality in the engine knock is detected when the upper limit (n_{pn}) is exceeded. In the event that the upper limit (n_{pn}) is exceeded a number of times beyond a predetermined limit, knock control is prohibited. See Tanaya at Col. 9, lines 2-14. As such, it is the abnormality in the operation of the engine that is detected so that the function of knock control may be prohibited by the engine control unit when the abnormality is determined not to be an instantaneous abnormality. Tanaya does not teach or suggest prohibiting operation of an aspect of the engine when an abnormality is detected in the engine control unit itself, as recited in Claim 11.

For at least the reason(s) provided above, Applicants respectfully submit that Nemoto and Tanaya, alone or in combination, do not teach or suggest each and every feature of rejected Claims 1 and 11, respectively. As such, Applicants respectfully submit that one of ordinary skill in the art would not find it obvious to modify Nemoto according to the teachings of Tanaya, since doing so would not arrive at the invention recited by Claims 1 and 11, respectively. Accordingly, Claims 1 and 11 should be deemed allowable over Nemoto and Tanaya.

Claims 2-10 depend from Claim 1 and Claims 12-20 depend from Claim 11. It is respectfully submitted that these dependent claims are allowable for at least the same reasons that Claims 1 and 11 are allowable, as well as for the additional subject matter

recited therein.

Applicants respectfully request withdrawal of the rejections.

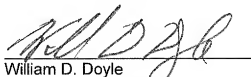
Conclusion

In view of the foregoing, Applicants respectfully request reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 1-20, and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing attorney docket number 107348-00393**.

Respectfully submitted,


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